

**UNITED STATES DEPARTMENT OF COMMERCE****United States Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/383,150	08/25/99 SHYU	R 3576BP/5295	

MM92/0509	ABRAHAM,F	EXAMINER
CHRISTIE PARKER & HALE LLP 350 WEST COLORADO BOULEVARD SUITE 500 P O BOX 7068 PASADENA CA 91190-7068	2826	ART UNIT
	05/09/01	PAPER NUMBER
		8
		DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks**

## Office Action Summary

Application No. <b>09/383,150</b>	Applicant(s) <b>SHYU</b>	Examiner <b>Fetsum Abraham</b> Art Unit <b>2826</b>
		

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1)  Responsive to communication(s) filed on Jan 2, 2001 *and the letter is paper # 7*

2a)  This action is FINAL.      2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle* 835 C.D. 11; 453 O.G. 213.

### Disposition of Claims

4)  Claim(s) 1-13 is/are pending in the application.

4a) Of the above, claim(s) 9-13 is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-8 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved.

12)  The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119

13)  Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a)  All b)  Some\* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

### Attachment(s)

15)  Notice of References Cited (PTO-892)

16)  Notice of Draftsperson's Patent Drawing Review (PTO-948)

17)  Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_

18)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

19)  Notice of Informal Patent Application (PTO-152)

20)  Other: \_\_\_\_\_

*[Signature]*  
**FETSUM ABRAHAM**  
**PRIMARY EXAMINER**

Art Unit: 2826

**Claims Rejection**

the election in Paper No. 5 has been acknowledged and the non elected claims 9-13 have been withdrawn from consideration.

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-8, so far as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Raad in view of the prior art submitted by applicant in figure 1.**

Raad shows a ~~frame~~ composed of chips (103) having receiving section adjacent to both chips at the central portion and supplied with internal connection leads (111), and plurality of external terminals (12) attached to the chips for external connection, but omit~~s~~to show how the external terminals are connected to the chips. However, figure 1 in the application shows that external connect terminals (13) are commonly connected with the chip through wires extended between the pads (110) on the chip and the external terminals. Therefore, it would have been obvious to one skilled in the art to use such a connection for all chips on a lead frame, since the method provides reliable wiring for IC chips..

Further, although the exact terms such as "windows" and "chip receiving windows" are not used by the prior art, it would have been obvious to one skilled in the art that the intention of the unclear terms are inherent to the structure because of structural similarity of the devices.

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As for said master and slave ICs in claim 7 and the testing element in claim 8, the prior art does not discriminate such devices as the structure is applicable to any type of chips in the art. Please note that the action is based on the fact that the interconnect structure in the prior art as being applicable for any type of device that can be formed in a IC chips including memory, testing elements, and any other known ICs.

**Claims 1-8, so far as understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Mostafazadeh et al in view of the prior art submitted by applicant in figure 1.**

Mostafazadeh et al show a frame (110) composed of chips (130) having receiving section adjacent to both chips at the central portion and supplied with internal connection leads, and plurality of external terminals or leads (120) attached to the chips for external connection.

Although the prior art omits to show bonding pads on the chips, the lead frame in figures 1c-1-1d3 clearly suggests the existence of the bonds on the IC chips for connecting leads (140) with the chips similar to any lead frame structure (see column 1, 10-20). But, to the alternative, figure 1 in the application shows that external connect terminals (13) are commonly connected with the chip through wires extended between the pads (110) on the chip and the external terminals. Therefore, it would have been obvious to one skilled in the art to use such a connection for all chips on a lead frame, since the method provides reliable wiring for IC chips, and is the most basic interconnect methods in lead frames.

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Further, although the exact terms such as "windows" and "chip receiving windows" are not used by the prior art, it would have been obvious to one skilled in the art that the intention of the unclear terms are inherent to the structure because of structural similarity of the devices.

As for said master and slave ICs in claim 7 and the testing element in claim 8, the prior art does not discriminate such devices as the structure is applicable to any type of chips in the art. Please note that the action is based on the fact that the interconnect structure in the prior art as being applicable for any type of device that can be formed in a IC chips including memory, testing elements, and any other known Ics.

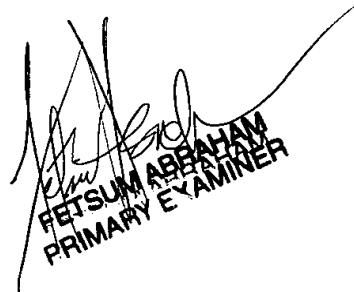
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Please refer to PN: 5,796,746. The circuit in the patent has a testing circuit on the frame.

Any inquiry concerning this communication should be directed to Fetsum Abraham at telephone number (703) 305-3793.

Fetsum Abraham

1/17/01



A handwritten signature in black ink, appearing to read "FETSUM ABRAHAM". Below the signature, the text "PRIMARY EXAMINER" is printed vertically in a smaller font.